

ABSTRACT OF THE DISCLOSURE

In playback of data recorded on an optical disk, an error minimization circuit holds a plurality of ideal values for partial response (PR) equalization as equalization targets, and updates tap coefficients of a finite impulse response (FIR) filter so that the errors between
5 the outputs of the FIR filter reflecting the output of an analog-to-digital converter (ADC) and the equalization targets are minimized. An error detection circuit and an addition/weighting circuit generate a signal representing the errors between the outputs of the FIR filter and the equalization targets as a parameter signal correlated with the error rate of played-back data. The quality of the analog signal is adjusted so that the parameter
10 signal is minimized, to thereby optimize the margin of the error rate of played-back data.